

|    | Type    | Hits   | Search Text  | DBs   | Time Stamp          | Com<br>men<br>ts | Er<br>ro<br>r<br>De<br>fi<br>ni<br>ti<br>on | Er<br>ro<br>rs |
|----|---------|--------|--|-------|---------------------|------------------|---|----------------|
| 1  | BR<br>S | 2736   | ((gain\$1 same (equaliz\$3 flat\$6) same filter\$3)<br>((DGE DGF) near7 filter\$3))  | USPAT | 2003/04/25<br>13:19 |                  |   | 0              |
| 2  | BF<br>S | 235564 | circulat\$4  | USPAT | 2002/08/27<br>17:51 |                  |   | 0              |
| 3  | BR<br>S | 1302   | ((diffract\$5 near3 grat\$3) same (light<br>beam\$1) near7 (dispers\$4 diffus\$4 scatter\$4)))<br>(concav\$2 near7 grat\$4)  | USPAT | 2002/08/27<br>18:36 |                  |   | 0              |
| 4  | BF<br>S | 67844  | liquid near1 crystal\$1  | USPAT | 2002/08/27<br>18:07 |                  |   | 0              |
| 5  | BR<br>S | 8704   | (mirror micromirror mirror micro-mirror) same<br>(reflect\$3 adj5 back)  | USPAT | 2002/08/27<br>18:07 |                  |   | 0              |
| 6  | BR<br>S | 0      | ((gain\$1 same (equaliz\$3 flat\$6) same<br>filter\$3) ((DGE DGF) near7 filter\$3)) and<br>circulat\$4 and (((diffract\$5 near3 grat\$3)<br>same (light beam\$1) near7 (dispers\$4 diffus\$4<br>scatter\$4))) (concav\$2 near7 grat\$4)) and<br>(liquid near1 crystal\$1) and (mirror<br>micromirror mirror micro-mirror) same<br>(reflect\$3 adj5 back) | USPAT | 2002/08/27<br>18:08 |                  |   | 0              |
| 7  | BR<br>S | 69915  | (mirror micromirror mirror micro-mirror) same<br>(reflect\$3)  | USPAT | 2002/08/27<br>18:25 |                  |   | 0              |
| 8  | BR<br>S | 0      | ((gain\$1 same (equaliz\$3 flat\$6) same<br>filter\$3) ((DGE DGF) near7 filter\$3)) and<br>circulat\$4 and (((diffract\$5 near3 grat\$3)<br>same (light beam\$1) near7 (dispers\$4 diffus\$4<br>scatter\$4))) (concav\$2 near7 grat\$4)) and<br>(liquid near1 crystal\$1) and (mirror<br>micromirror mirror micro-mirror) same<br>(reflect\$3)           | USPAT | 2002/08/27<br>18:08 |                  |   | 0              |
| 9  | BR<br>S | 10031  | (diffract\$5 near3 grat\$3)  | USPAT | 2002/08/27<br>18:09 |                  |   | 0              |
| 10 | BR<br>S | 11     | ((gain\$1 same (equaliz\$3 flat\$6) same<br>filter\$3) ((DGE DGF) near7 filter\$3)) and<br>circulat\$4 and (((diffract\$5 near3 grat\$3) )   | USPAT | 2002/08/27<br>18:11 |                  |   | 0              |
| 11 | BR<br>S | 3      | ((gain\$1 same (equaliz\$3 flat\$6) same<br>filter\$3) ((DGE DGF) near7 filter\$3)) and<br>circulat\$4 and (((diffract\$5 near3 grat\$3) )<br>and (mirror micromirror mirror micro-mirror)<br>same (reflect\$3)  | USPAT | 2002/08/28<br>15:54 |                  |   | 0              |
| 12 | BR<br>S | 11     | ((gain\$1 same (equaliz\$3 flat\$6) same<br>filter\$3) ((DGE DGF) near7 filter\$3)) and<br>circulat\$4 and (((diffract\$5 near3 grat\$3) )<br>and (mirror micromirror mirror micro-mirror)<br>reflect\$3)  | USPAT | 2002/08/28<br>19:47 |                  |   | 0              |
| 13 | BR<br>S | 2      | ((gain\$1 same (equaliz\$3 flat\$6) same<br>filter\$3) ((DGE DGF) near7 filter\$3)) and<br>circulat\$4 and (((diffract\$5 near3 grat\$3)<br>same (light beam\$1) near7 (dispers\$4 diffus\$4<br>scatter\$4))) (concav\$2 near7 grat\$4))   | USPAT | 2002/08/27<br>18:37 |                  |   | 0              |

|    | Type    | Hits | Search Text   | DBs         | Time Stamp          | Com<br>men<br>ts | Er<br>ro<br>r<br>De<br>fi<br>ni<br>ti<br>on | Er<br>ro<br>rs |
|----|---------|------|---|-------------|---------------------|------------------|---|----------------|
| 15 | BR<br>S | 1    | ((gain\$1 same (equaliz\$3 flat\$6) same filter\$3) ((DGE DGF) near7 filter\$3)) and circulat\$4 and ((diffract\$5 near3 grat\$3) )) and (mirror micromirror mirror micro-mirror reflect\$3)) and liquid near1 crystal\$1   | USPAT       | 2002/08/27<br>18:40 |                  |   | 0              |
| 16 | BR<br>S | 12   | ((gain\$1 same (equaliz\$3 flat\$6) same filter\$3) ((DGE DGF) near7 filter\$3)) and circulat\$4 and ((diffract\$5 near3 grat\$3) same (light beam\$1) near7 (dispers\$4 diffus\$4 scatter\$4)) (concav\$2 near7 grat\$4)) ((gain\$1 same (equaliz\$3 flat\$6) same filter\$3) ((DGE DGF) near7 filter\$3)) and circulat\$4 and ((diffract\$5 near3 grat\$3) )) | USPAT       | 2003/06/20<br>17:53 |                  |   | 0              |
| 17 | BR<br>S | 5    | ("6434291" "6327280" "6275623" "6154590" "5805759" "5598294" "5408481".pn.) and spectral  | USPAT       | 2002/08/27<br>18:46 |                  |   | 0              |
| 18 | BR<br>S | 2    | ((("6434291" "6327280" "6275623" "6154590" "5805759" "5598294" "5408481".pn.) and (spectral same circulat\$4  | USPAT       | 2002/08/28<br>19:44 |                  |   | 0              |
| 19 | BR<br>S | 0    | ((gain\$1 same (equaliz\$3 flat\$6) same filter\$3) ((DGE DGF) near7 filter\$3)) and circulat\$4 and ((diffract\$5 near3 grat\$3) same (light beam\$1) near7 (dispers\$4 diffus\$4 scatter\$4)) (concav\$2 near7 grat\$4)) ((gain\$1 same (equaliz\$3 flat\$6) same filter\$3) ((DGE DGF) near7 filter\$3)) and circulat\$4 and ((diffract\$5 near3 grat\$3) )) | EPO;<br>JPO | 2002/08/28<br>12:08 |                  |   | 0              |
| 20 | BR<br>S | 0    | ((gain\$1 same (equaliz\$3 flat\$6) same filter\$3) ((DGE DGF) near7 filter\$3)) and circulat\$4 and ((diffract\$5 near3 grat\$3) )) and (mirror micromirror mirror micro-mirror reflect\$3)  | EPO;<br>JPO | 2002/08/28<br>10:47 |                  |   | 0              |
| 21 | BR<br>S | 7    | ("6434291" "6327280" "6275623" "6154590" "5805759" "5598294" "5408481".pn.)   | USPAT       | 2002/08/28<br>12:05 |                  |   | 0              |
| 22 | BR<br>S | 1    | ((("6434291" "6327280" "6275623" "6154590" "5805759" "5598294" "5408481".pn.) and liquid near5 crystal\$1   | USPAT       | 2002/08/28<br>17:50 |                  |   | 0              |
| 23 | BR<br>S | 1    | ((("6434291" "6327280" "6275623" "6154590" "5805759" "5598294" "5408481".pn.) and liquid near1 crystal\$1)) and (gain\$1 same (equaliz\$3 flat\$6) same filter\$3) ((DGE DGF) near7 filter\$3))   | USPAT       | 2002/08/28<br>11:08 |                  |   | 0              |
| 24 | BR<br>S | 1    | 6275623.pn. and spatial spectral bandwidth diffract\$4)   | USPAT       | 2002/08/28<br>12:09 |                  |   | 0              |
| 25 | BR<br>S | 1    | 6275623.pn. and (spatial saame (spectral bandwidth diffract\$4))  | USPAT       | 2002/08/28<br>12:10 |                  |   | 0              |
| 26 | BR<br>S | 0    | 6275623.pn. and spatial same spectral same bandwidth same diffract\$4)  | USPAT       | 2002/08/28<br>12:10 |                  |   | 0              |

|    | Type    | Hits | Search Text   | DBs   | Time Stamp          | Comments | Error Definition | Errors |
|----|---------|------|---|-------|---------------------|----------|------------------|--------|
| 29 | BR<br>S | 0    | ((("6434291" "6327280" "6275623" "6154590"<br>"5805759" "5598294" "5408481").pn.) and<br>polymer\$4   | USPAT | 2002/08/28<br>15:45 |          |                  | 0      |
| 30 | BR<br>S | 12   | ("6434291"<br>"6327280"<br>"6275623"<br>"6154590"<br>"5805759"<br>"5598294"<br>"5408481"<br>"6289699"<br>"6148128"<br>"6141470"<br>"6055348"<br>"5805751").pn.                        | USPAT | 2002/08/28<br>15:50 |          |                  | 0      |
| 31 | BR<br>S | 0    | ((("6434291"<br>"6327280"<br>"6275623"<br>"6154590"<br>"5805759"<br>"5598294"<br>"5408481"<br>"6289699"<br>"6148128"<br>"6141470"<br>"6055348"<br>"5805751").pn.)<br>) and polymer\$5 | USPAT | 2002/08/28<br>15:50 |          |                  | 0      |
| 32 | BR<br>S | 0    | ((gain\$1 same (equaliz\$3 flat\$6) same<br>filter\$3) ((DGE DGF) near7 filter\$3)) and<br>circulat\$4 and ((diffract\$5 near3 grat\$3)))<br>and (polymer\$3)                         | USPAT | 2002/08/28<br>15:55 |          |                  | 0      |
| 33 | BR<br>S | 5    | ((gain\$1 same filter\$3) ((DGE DGF) near7<br>filter\$3)) and circulat\$4 and ((diffract\$5<br>near3 grat\$3))) and (polymer\$3)  | USPAT | 2002/08/28<br>16:00 |          |                  | 0      |
| 34 | BR<br>S | 0    | ((gain\$1 same filter\$3) ((DGE DGF) near7<br>filter\$3)) and circulat\$4 and ((diffract\$5<br>near3 grat\$3))) and (polymer\$3)) and nematic   | USPAT | 2002/08/28<br>15:57 |          |                  | 0      |
| 35 | BR<br>S | 5    | ((gain\$1 same filter\$3) ((DGE DGF) near7<br>filter\$3)) and circulat\$4 and ((diffract\$5<br>near3 grat\$3))) and (polymer\$3)) and mirror\$1                                       | USPAT | 2002/08/28<br>15:57 |          |                  | 0      |
| 36 | BR<br>S | 4    | ((gain\$1 same filter\$3) ((DGE DGF) near7<br>filter\$3)) and circulat\$4 and ((diffract\$5<br>near3 grat\$3))) and (polymer\$3)) and spectral  | USPAT | 2002/08/28<br>15:59 |          |                  | 0      |
| 37 | BR<br>S | 0    | ((gain\$1 same filter\$3) ((DGE DGF) near7<br>filter\$3)) and circulat\$4 and ((diffract\$5<br>near3 grat\$3))) and (polymer\$3)) and mems  | USPAT | 2002/08/28<br>15:59 |          |                  | 0      |
| 38 | BR<br>S | 1    | ((gain\$1 same filter\$3) ((DGE DGF) near7<br>filter\$3)) and ((diffract\$5 near3 grat\$3)))  | USPAT | 2002/08/28<br>15:59 |          |                  | 0      |
| 4  | BR<br>S | 1    | wavelength\$1<br>control\$4 equaliz\$4 near7 light\$1 mem\$1<br>wavelength\$1   | USPAT | 2002/08/28<br>15:59 |          |                  | 0      |

|    | Type    | Hits | Search Text   | DBs                    | Time Stamp       | Comments | Errors |
|----|---------|------|---|------------------------|------------------|----------|--------|
| 41 | BR<br>S | 1    | (6275623.pn. and (((each individual) near4 (wavelength\$1 beam\$1 \$3beam \$3beams)) ((control\$4 equaliz\$4) near7 (light beam\$1 wavelength\$1)))) and (grating refract\$4 incident lines defract\$4)   | USPAT                  | 2003/01/13 11:07 |          | 0      |
| 42 | BR<br>S | 1    | 6275623.pn.   | USPAT                  | 2003/04/25 13:19 |          | 0      |
| 43 | BR<br>S | 1    | 6275623.pn. and (discret\$3 grating control\$4)   | USPAT                  | 2003/04/25 13:22 |          | 0      |
| 44 | BR<br>S | 13   | ((gain\$1 same (equaliz\$3) same filter\$3) ((DGE DGF) near7 filter\$3)) and (((diffract\$5 near3 grat\$3) same ((light beam\$1) near7 (dispers\$4 diffus\$4 scatter\$4))) (concav\$2 near7 grat\$4))) ((gain\$1 same (equaliz\$3) same filter\$3) ((DGE DGF) near7 filter\$3)) and ((diffract\$5 near3 grat\$3))) and mirror   | USPAT                  | 2003/06/23 11:32 |          | 0      |
| 45 | BR<br>S | 0    | ((gain\$1 same (equaliz\$3) same filter\$3) ((DGE DGF) near7 filter\$3)) and (((diffract\$5 near3 grat\$3) same ((light beam\$1) near7 (dispers\$4 diffus\$4 scatter\$4))) (concav\$2 near7 grat\$4))) ((gain\$1 same (equaliz\$3) same filter\$3) ((DGE DGF) near7 filter\$3)) and ((diffract\$5 near3 grat\$3))) and mirror) and ((liquid near1 crystal\$1) mems)                   | USPAT;<br>US-PGP<br>UB | 2003/06/20 18:02 |          | 0      |
| 46 | BR<br>S | 13   | ((gain\$1 same (equaliz\$3) same filter\$3) ((DGE DGF) near7 filter\$3)) and (((diffract\$5 near3 grat\$3) same ((light beam\$1) near7 (dispers\$4 diffus\$4 scatter\$4))) (concav\$2 near7 grat\$4))) ((gain\$1 same (equaliz\$3) same filter\$3) ((DGE DGF) near7 filter\$3)) and ((diffract\$5 near3 grat\$3))) and mirror) and ((diffraction\$4 near1 grating\$1) dg)             | USPAT;<br>US-PGP<br>UB | 2003/06/23 11:35 |          | 0      |
| 47 | BR<br>S | 5    | ((gain\$1 same (equaliz\$3) same filter\$3) ((DGE DGF) near7 filter\$3)) and (((diffract\$5 near3 grat\$3) same ((light beam\$1) near7 (dispers\$4 diffus\$4 scatter\$4))) (concav\$2 near7 grat\$4))) ((gain\$1 same (equaliz\$3) same filter\$3) ((DGE DGF) near7 filter\$3)) and ((diffract\$5 near3 grat\$3))) and mirror) and ((diffraction\$4 near1 grating\$1) dg) and focals2 | USPAT;<br>US-PGP<br>UB | 2003/06/23 14:06 |          | 0      |
| 48 | BR<br>S | 42   | ((gain\$1 same (equaliz\$3) same filter\$3) ((DGE DGF) near7 filter\$3)) and (fold\$3 near2 (mirror micromirror))   | USPAT                  | 2003/06/23 15:16 |          | 0      |
| 49 | BR<br>S | 24   | ((gain\$1 same (equaliz\$3) same filter\$3) ((DGE DGF) near7 filter\$3)) and (fold\$3 near2 (mirror micromirror)) and ((light beam\$1) near7 (dispers\$4 diffus\$4 scatter\$4))   | USPAT;<br>US-PGP<br>UB | 2003/06/23 11:36 |          | 0      |
|    |         |      | ((gain\$1 same (equaliz\$3) same filter\$3)   |                        |                  |          |        |
|    | BR<br>S |      | (DGE DGF) near7 filter\$3) and (fold\$3 near2 (mirror micromirror)) and (light beam\$1)   | USPAT;<br>US-PGP<br>UB | 2003/06/23 11:45 |          |        |

|    | Type    | Hits | Search Text  | DBs                    | Time Stamp          | Comments | Error Definition | Errors |
|----|---------|------|--|------------------------|---------------------|----------|------------------|--------|
| 52 | BR<br>S | 6    | ((((gain\$1 same (equaliz\$3) same filter\$3)<br>((DGE DGF grating) near7 filter\$3)) and<br>(fold\$3 near2 (mirror micromirror))) and<br>circulat\$4) and focal             | USPAT;<br>US-PGP<br>UB | 2003/06/23<br>11:48 |          |                  | 0      |
| 53 | BR<br>S | 1    | 6327280.pn.  | USPAT;<br>US-PGP<br>UB | 2003/06/23<br>14:30 |          |                  | 0      |
| 54 | BR<br>S | 1    | 6275623.pn.  | USPAT;<br>US-PGP<br>UB | 2003/06/23<br>14:18 |          |                  | 0      |
| 55 | BR<br>S | 8    | ((gain\$1 same (equaliz\$3) same filter\$3)<br>((DGE DGF grating) near7 filter\$3)) and<br>(fold\$3 near1 (mirror micromirror)) and<br>(dispers\$4 grating: near3 concav\$3) | USPAT;<br>US-PGP<br>UB | 2003/06/23<br>14:19 |          |                  | 0      |
| 56 | BR<br>S | 0    | 6327280.pn. and (liquid near1 cryst\$3)  | USPAT;<br>US-PGP<br>UB | 2003/06/23<br>14:31 |          |                  | 0      |
| 57 | BR<br>S | 1    | 6275623.pn. and (liquid near2 cryst\$3)  | USPAT;<br>US-PGP<br>UB | 2003/06/23<br>14:31 |          |                  | 0      |
| 58 | BR<br>S | 1316 | aberration near6 (adjust\$4 correct\$4) near7<br>concave near6 grating near5 concave   | USPAT;<br>US-PGP<br>UB | 2003/06/23<br>15:17 |          |                  | 0      |
| 59 | BR<br>S | 0    | aberration near6 (adjust\$4 correct\$4) near7<br>concave near6 grating near5 concave and (gain<br>near1 equaliz\$4)  | USPAT;<br>US-PGP<br>UB | 2003/06/23<br>15:19 |          |                  | 0      |
| 60 | BR<br>S | 13   | aberration near6 (adjust\$4 correct\$4) near7<br>concave near6 grating near5 concave   | USPAT;<br>US-PGP<br>UB | 2003/06/23<br>15:21 |          |                  | 0      |
| 61 | BR<br>S | 0    | ((aberration near6 (adjust\$4 correct\$4) near7<br>concave near6 grating near5 concave ) and<br>filter\$3) and gain  | USPAT;<br>US-PGP<br>UB | 2003/06/23<br>15:19 |          |                  | 0      |
| 62 | BR<br>S | 10   | (aberration near6 (adjust\$4 correct\$4) near7<br>concave near6 grating near5 concave ) and<br>filter\$3   | USPAT;<br>US-PGP<br>UB | 2003/06/23<br>15:21 |          |                  | 0      |
| 63 | BR<br>S | 13   | aberration near6 (adjust\$4 correct\$4) near7<br>concave near6 grating near5 concave near7<br>diffract\$4  | USPAT;<br>US-PGP<br>UB | 2003/06/23<br>15:21 |          |                  | 0      |
| 64 | BR      |      | (aberration near6 (adjust\$4 correct\$4) near7   | USPAT;                 | 2003/06/23          |          |                  |        |
| 65 | S       |      | light beam\$1 near7 dispers\$4 diffract\$4<br>scatter\$4 and concave   | USPAT;<br>US-PGP<br>UB | 2003/06/23<br>15:19 |          |                  |        |

|    | Type    | Hits | Search Text  | DBs                         | Time Stamp          | Comments | Errors |
|----|---------|------|--|-----------------------------|---------------------|----------|--------|
| 66 | BR<br>S | 0    | ((gain\$1 same (equaliz\$3) same filter\$3)<br>((DGE DGF grating) near7 filter\$3)) and<br>(fold\$3 near2 (mirror micromirror)) and<br>(modulat\$4 near4 concave)                  | USPAT;<br>US-PGP<br>UB      | 2003/06/23<br>15:43 |          | 0      |
| 67 | BR<br>S | 0    | (gain near1 equaliz\$3) and (modulat\$4 near4<br>concave) same grating   | USPAT;<br>US-PGP<br>UB      | 2003/06/23<br>15:44 |          | 0      |
| 68 | BR<br>S | 0    | (gain near1 equaliz\$3) and ((modulat\$4 near4<br>concave) same grating)   | USPAT;<br>US-PGP<br>UB      | 2003/06/23<br>15:45 |          | 0      |
| 69 | BR<br>S | 0    | (gain near1 equaliz\$3) and (modulat\$4 near4<br>concave) and grating  | USPAT;<br>US-PGP<br>UB      | 2003/06/23<br>15:45 |          | 0      |
| 70 | BR<br>S | 0    | (gain near1 equaliz\$3) and (modulat\$4 near4<br>concave) and grating  | EPO;<br>JPO;<br>DERWEN<br>T | 2003/06/23<br>15:45 |          | 0      |
| 71 | BR<br>S | 2    | (filter) and ((modulat\$4 near4 concave) same<br>grating)  | USPAT;<br>US-PGP<br>UB      | 2003/06/23<br>15:46 |          | 0      |
| 72 | BR<br>S | 0    | ((gain\$1 same (equaliz\$3) same filter\$3)<br>((DGE DGF grating) near7 filter\$3)) and<br>(fold\$3 near2 (mirror micromirror)) and<br>(liquid liquidcrystal\$3) near4 polymer\$1) | USPAT;<br>US-PGP<br>UB      | 2003/06/23<br>16:15 |          | 0      |
| 73 | BR<br>S | 2    | (gain\$1 near7 equaliz\$3) and (((liquid near1<br>crystal) liquidcrystal\$3) near4 polymer\$1)<br>same modulat\$3)   | USPAT                       | 2003/06/23<br>16:24 |          | 0      |
| 74 | BR<br>S | 2    | (gain\$1 near7 equaliz\$3) and (((liquid near1<br>crystal) liquidcrystal\$3) near7 polymer\$1)<br>same modulat\$3)   | USPAT                       | 2003/06/23<br>16:32 |          | 0      |
| 75 | BR<br>S | 4    | ((tec (thermal\$4 near4 expand\$3 near4 core))<br>near7 fiber) and (gain near7 equaliz\$3)   | USPAT;<br>US-PGP<br>UB      | 2003/06/23<br>18:21 |          | 0      |
| 76 | BR<br>S | 1    | 6275623.pn. and (control\$3 same grating)  | USPAT;<br>US-PGP<br>UB      | 2003/06/23<br>18:26 |          | 0      |
| 77 | BR<br>S | 1    | 6275623.pn. and ((control\$3 same ('40'<br>grating)) (grating near7 (correct\$4 adjust\$3<br>modif\$7 chang\$5)))  | USPAT;<br>US-PGP<br>UB      | 2003/06/23<br>18:28 |          | 0      |
| 78 | BR<br>S | 1    | 6275623.pn. and ((control\$4 same ('40'<br>grating)) (grating near7 (correct\$4 adjust\$3<br>modif\$7 chang\$5)))  | USPAT;<br>US-PGP<br>UB      | 2003/06/23<br>18:29 |          | 0      |